



**Defense Information Systems Agency**

Department of Defense

# **National Senior Leadership Decision Support Service (NSLDSS JCTD)**

DISA Customer  
Conference  
Lt Col Kevin Nyberg



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# BACKGROUND

- 16 April 08 Memorandum For, VCJCS tasked DISA to provide technical engineering support to aid in the NMCS

1. The Joint Staff has embarked upon a transformation effort that will alter the way we do business here on the staff and throughout the COCOMs. We must embrace a different operating model (persistent collaboration and social networking) and the technologies of the 21<sup>st</sup> century to maintain a global awareness, respond with light speed, and secure a competitive edge through leveraging intellectual capital wherever it is.

## ***VCJCS Number 1 Priority***

### **a) Senior Leadership Decision Support (aka – the Laptop)**

The Joint Staff/J3 is leading a task to provide national senior leadership ready access to global situational awareness along with ability to discuss options and make decisions in response to events. The objective is to reduce the time to understand a situation while increasing the time to respond in an expanding set of traditional and non-traditional scenarios. Critical engineering support and NCES expertise is resident within DISA to fast-track this effort.

# Operational Need

- The Joint Staff has initiated a transformation effort to improve global awareness business processes within the staff's operations and also throughout the COCOMs. To support this improved global awareness a new operational model is required which accesses and leverages the strengths of intellectual capital regardless of its location. Active social networking conducted over persistent collaboration can achieve the increase in the level of this access. Additionally, this transformation requires the secure exposure and discovery of information at an unprecedented level.  
Rapidly bring in Web 2.0 capability to the DoD



# Mission Context

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- **At any given time, military forces around the world as a whole are engaged in multiple types of missions**
  - **Each has unique information and decision-making needs based on geography, time scales, participants, and the essential nature of each type of operation**
- **Emergent crises may develop against a backdrop of ongoing deliberately planned operations or other crisis responses**
  - **Must understand and manage multiple concurrent activities, drilling deep into any one of them without losing sight of the global context**
- **The physical location of senior leaders who participate in national decision-making processes is not always predictable**
  - **Must establish a threshold level of support regardless of a senior leader's location**



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# NSLDSS Objectives

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- **Provide accurate, timely, and focused SA of situations, operations, and events of interest around the world**
- **Enable collaborative development, presentation, assessment, and selection of CoA options to respond to some event or situation of concern**
- **Support collaborative decision-making during national conferences**
- **Deliver key data to senior leaders regardless of their physical location and display device, as long as they have access to the correct network**



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# What is NSLDSS?

**NSLDSS  
Implementation  
on  
Directive**

The overarching purpose of the NSLDSS is to reduce the time required to achieve and maintain situational awareness and increase the time available for improved decision making, while operating within an opponent's timeline ability to make a decision. This is achieved by automating and integrating the collection of data that supports situational awareness with the development of courses of action (options) and providing a comprehensive and integrated synopsis of an event, enabling a decision to be based on an informed fully traceable basis. The technical implementation, architecture and engineering is designed to be loosely coupled service that are available via standard interfaces and protected using a combination of enterprises security and identity management and local policy enforcement. This enterprise capability improves information sharing through collaborative tools and web based applications. The end state is the ability to access the information securely from the advantaged user at a fixed facility to the disadvantaged user with a handheld device, anytime anywhere (aka The Laptop). This capability must also support collaboration with traditional and non-traditional partners, leveraging intellectual capital wherever it is.

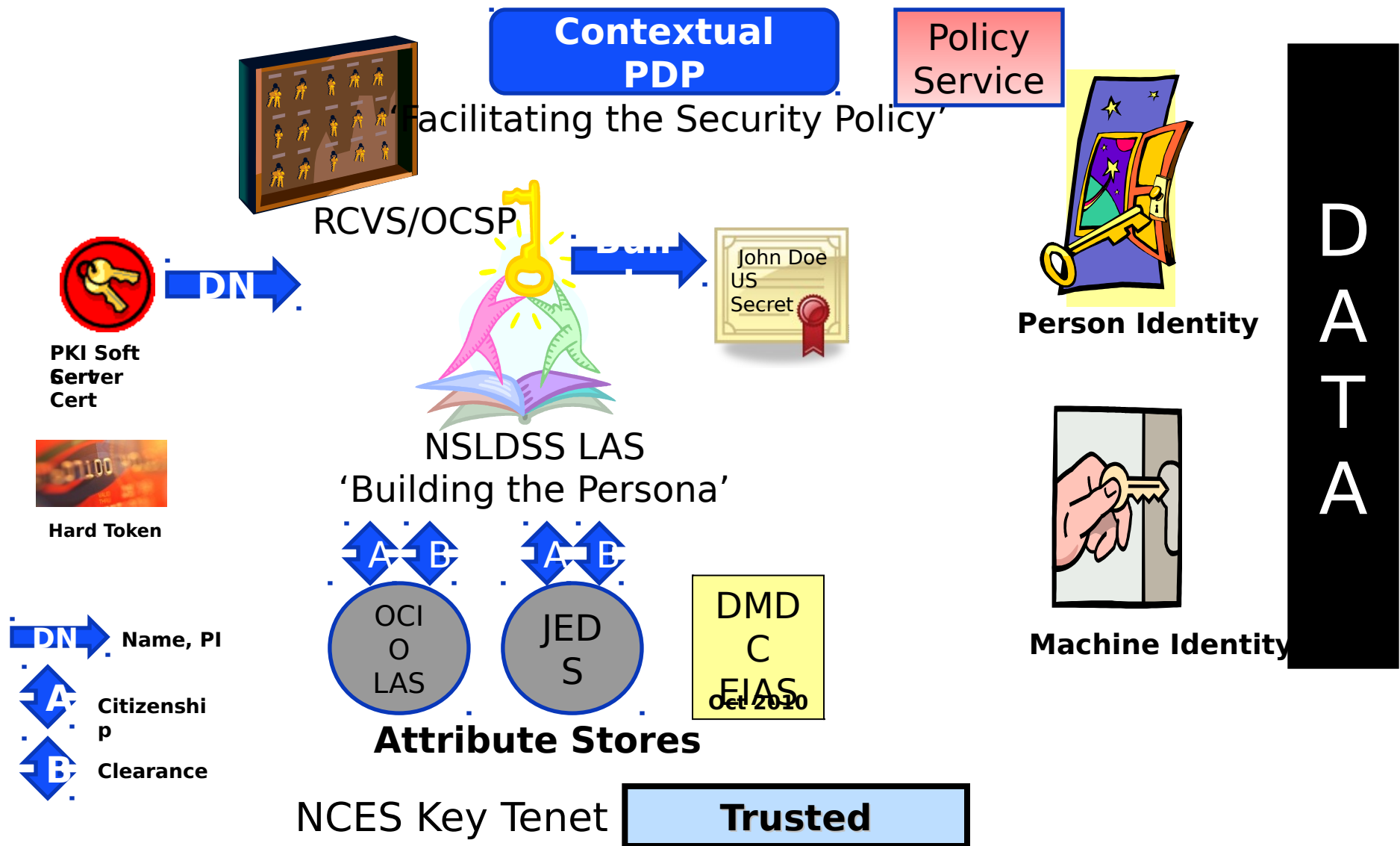
**Loosely coupled. Securely exposed to Enterprise. From a thin-client.**

# DISA Composable Services Approach



**Executing the Department's Net-Centric Strategy**

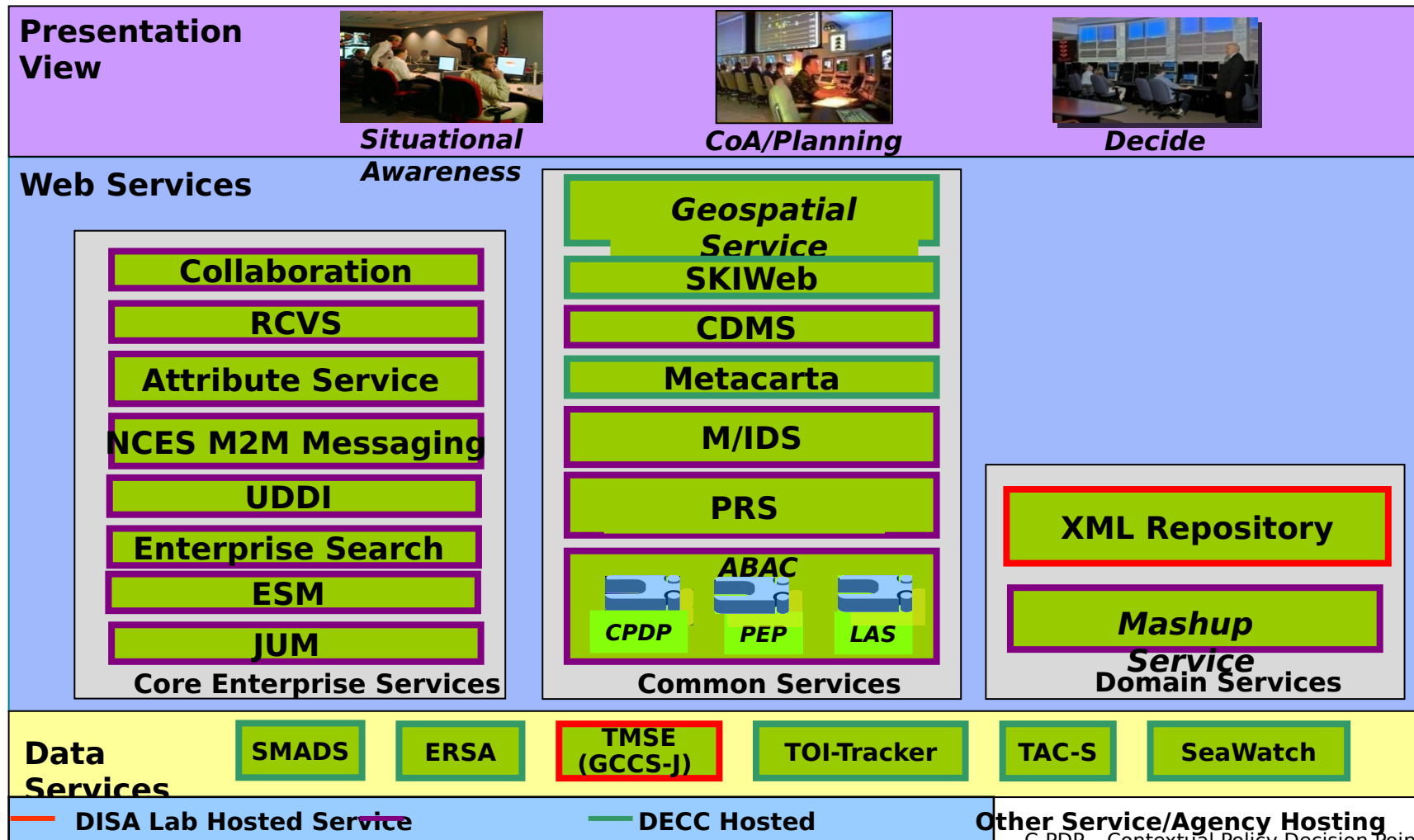
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**NSLDSS Secure Information Sharing Approach**





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# NSLDSS Services



RCVS - Robust Certificate Validation Service

UDDI - Universal Description, Discovery and Integration

ESM - Enterprise Service Management  
(WS\_Events)

PRS - Policy Retrieval Service

LAS - Local Attribute Service

JUM - Joint User Messaging (WS\_Notification)

M/IDS - Machine Identity Service

M2M - NCES Messaging

## Other Service/Agency Hosting

C-PDP - Contextual Policy Decision Point  
CDMS - Common Data Mediation Service



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# Operation Noble Eagle

NSLSS StrategicWatch

https://sw.jackbe.com/mho-ext3.2/

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NSLSS StrategicWatch

## STRATEGICWATCH

User: Michael J. Ho

Quick Panel

Registered Services

- Cheryl
- Classification
- Haiti Earthquake
- Haiti Video
- Joint User Messaging
- ALERTCON1
- News
- CNNRSS
- Mikes Yahoo News
- Ozonery
- Google
- iSearch
- RSS
- FiveCentNickel
- Test
- TOI
- Unspecified
- art14578 test
- ICare
- Sr Leader Summary 2
- ThomasBayer
- ThomasBayerCustomer
- Video
- Weather
- Caribbean Tsunami
- Earth Quakes
- Earthquakes
- Indian Tsunami
- Pacific Tsunami
- SamplegetYahooTraffic
- Shared UDOPs
- Chat

Sample Tab

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NORAD Conferences

| Num  | Conference Type | Senior Official | Convened |
|------|-----------------|-----------------|----------|
| None |                 |                 |          |
| None |                 |                 |          |

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FiveCentNickel

Best Retirement Plan for Small Business Owners?

Strategic Defaults: Buy

Home Improvement: DIY and Save Money

Lending Club: One Year Later

20:

How to Add Linked Accounts to ING Direct

Death and (No) Taxes: The 2010 Est

| Name    | Value                                           |
|---------|-------------------------------------------------|
| pubDate | Wed, 11 Aug 2010 12:24:24 GMT                   |
| title   | Best Retirement Plan for Small Business Owners? |

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ERSA

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Multisystem Correlation Tracker

| Name          | Value            |
|---------------|------------------|
| recordGeoType | geospatial_track |
| body          | Multisystem      |
| awesomeDoc    | Correlation      |
| awesomeTitle  | Tracker          |
| body          | -26.16082        |
| awesomeDoc    |                  |
| awesomeHeac   |                  |
| body          | 42.36212         |
| awesomeDoc    | -71.01523        |
| awesomePoint  | 1167.94324       |
| body          | info:adsoa/gid:  |
| awesomeDoc    | BOS-1:4035       |
| awesomeUID    |                  |

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CNNRSS

Pakistanis begin Ramadan with misery of floods

Wed, 11 Aug 2010 23:58:12 GMT

show details

Stevens, O'Keefe plane was 'smashed'

Thu, 12 Aug 2010 01:34:55 GMT

show details

Jury: 14 years for bin Laden driver

Thu, 12 Aug 2010 00:45:49 GMT

hide details

A military jury at the U.S. facility in Guantanamo Bay recommended a 14-year prison term for a Sudanese man who served as cook and driver for Osama bin Laden.

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TOI Sr Leader Summary

Data Last Updated: 10:03:08z Age: 2010-06-23:10:03:08

real world

oceanic

Call Sign: oceanic

Track ID: 654321

Type/Tail: air bus a330 / 2121

Crew/Pax: 1 / 2

Origin/Dest: lad to atl

VIPs: 3

Priority: 2

LAW FAM FFDO Door Cmpny Cxc

Hostile Intent Indicators:

| EA:           |                                  |            |              |
|---------------|----------------------------------|------------|--------------|
| NORDO         | Off Ft Pin                       | POI Onrd   | Stolen       |
| Unresp to FAA | Unresp to ICAO                   | Viol Rules | Unusual Mvrs |
| 7600 - nordo  | 12 - physically abusive behavior |            |              |

Reason TOI: this is a test, trying to set every option to no

Intel: \test\Intel

| Engagement Criteria:     | Met | Time |
|--------------------------|-----|------|
| ttd < 5 minutes          | No  |      |
| below 10000 ft           | No  |      |
| not on published arrival | No  |      |

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Done

1 Error



# Key Design Tenets

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- **Leverage enterprise services**
  - Use NCES services as available for core functions related to security, collaboration, etc.
- **Expose data to the enterprise as a service**
  - Expose data products built within NSLDSS back to the enterprise in a manner consistent with the net centric data strategy
- **Use an adaptable, layered architecture**
  - Separate key functions of data access, business logic, and presentation into distinct layers
  - Facilitates evolution and extension of architecture
- **Facilitate trust**
  - Use authoritative data sources
  - Establish pedigree of any data used
  - Leveraging user's attributes for enterprise authentication



# NSLDSS Forge.mil Practices

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- **Change in Configuration Management and Software development and Deployment**
- **Effective tool for requirements management**
- **Allows for improved resource planning for systems and software engineering**
- **Facilitates requirements prioritization (e.g. Need to have, Wants, and Nice to have capabilities)**
- **Effective Software Sharing Capability across the DoD community (DIA-DISA)**



# Technical Lessons Learned

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- Service Oriented Architecture can work in the DoD
- ABAC can be used to provide access decisions
- Shoulder-to-shoulder integration worked well
- Composable services are still maturing and complex
  - standard configurations continue to be problematic (desktop, browser, ports/protocols)
  - performance (rate and latency) can vary
- Security and data sharing can co-exist but is still difficult (culturally)
  - soft certificates are difficult to obtain
  - common schemas between communities are hard to develop
- Mashup tools provide value in sharing information
  - mashup capability between disparate data sources is very powerful
  - tools are better suited for combat developers/"geeks" than casual users and operators



[https://strategicwatch.ces  
mil/](https://strategicwatch.ces.mil/)